OIPE

RAW SEQUENCE LISTING

DATE: 06/26/2001

PATENT APPLICATION: US/09/848,164

TIME: 15:15:09

Input Set : N:\Crf3\RULE60\09848164.txt Output Set: N:\CRF3\06262001\I848164.raw ENTERED

## SEQUENCE LISTING

```
4 (1) GENERAL INFÓRMATION:
             (i) APPLICANT: Rhode, Peter R.
      6
      7
                             Jiao, Jin-An
      8
                             Burkhardt, Martin
      9
                             Wong, Hing
             (ii) TITLE OF INVENTION: MHC COMPLEXES AND USES THEREOF
     11
           (iii) NUMBER OF SEQUENCES: 124
     13
            (iv) CORRESPONDENCE ADDRESS:
     15
     16
                   (A) ADDRESSEE: Dade International, Inc.
     17
                   (B) STREET: 1717 Deerfield Road
     18
                   (C) CITY: Deerfield
     19
                   (D) STATE: Illinois
     20
                   (E) COUNTRY: USA
                   (F) ZIP: 60015
     21
             (v) COMPUTER READABLE FORM:
     23
                   (A) MEDIUM TYPE: Floppy disk
     24
     25
                   (B) COMPUTER: IBM PC compatible
                   (C) OPERATING SYSTEM: PC-DOS/MS-DOS
     26
     27
                   (D) SOFTWARE: PatentIn Release #1.0, Version #1.30
     29
            (vi) CURRENT APPLICATION DATA:
                   (A) APPLICATION NUMBER: US/09/848,164
C--> 30
C--> 31
                   (B) FILING DATE: 03-May-2001
     32
                   (C) CLASSIFICATION:
           (vii) PRIOR APPLICATION DATA:
     42
     35
                   (A) APPLICATION NUMBER: 09/067,615
     36
                   (B) FILING DATE:
     39
                   (A) APPLICATION NUMBER: US 08/382,454
     40
                   (B) FILING DATE: 01-FEB-1995
     43
                   (A) APPLICATION NUMBER: US 08/283,302
                   (B) FILING DATE: 29-JUL-1994
     44
     46
          (viii) ATTORNEY/AGENT INFORMATION:
     47
                   (A) NAME: Pearson, Louise S.
     48
                   (B) REGISTRATION NUMBER: 32,369
                   (C) REFERENCE/DOCKET NUMBER: STR-4665-CIP2
     49
            (ix) TELECOMMUNICATION INFORMATION:
                   (A) TELEPHONE: (708) 267-5300
     52
                   (B) TELEFAX: (708) 267-5376
     53
        (2) INFORMATION FOR SEQ ID NO: 1:
     58
             (i) SEQUENCE CHARACTERISTICS:
     59
                   (A) LENGTH: 10 amino acids
     60
                   (B) TYPE: amino acid
     61
                   (C) STRANDEDNESS: unknown
     62
                   (D) TOPOLOGY: unknown
     64
            (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
     66
             Ala Ser Gly Gly Gly Gly Ser Gly Gly Gly
```

RAW SEQUENCE LISTING DATE: 06/26/2001 PATENT APPLICATION: US/09/848,164 TIME: 15:15:09

Input Set : N:\Crf3\RULE60\09848164.txt
Output Set: N:\CRF3\06262001\I848164.raw

```
70 (2) INFORMATION FOR SEQ ID NO: 2:
        (i) SEQUENCE CHARACTERISTICS:
73
             (A) LENGTH: 8 base pairs
74
             (B) TYPE: nucleic acid
75
             (C) STRANDEDNESS: unknown
76
             (D) TOPOLOGY: unknown
78
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
80 CCACCATG
83 (2) INFORMATION FOR SEQ ID NO: 3:
85
        (i) SEQUENCE CHARACTERISTICS:
86
             (A) LENGTH: 18 amino acids
87
             (B) TYPE: amino acid
             (C) STRANDEDNESS: unknown
88
89
             (D) TOPOLOGY: unknown
91
       (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
93
        Ser Ile Ser Gln Ala Val His Ala Ala His Ala Glu Ile Asn Glu Ala
94
96
        Gly Arg
99 (2) INFORMATION FOR SEQ ID NO: 4:
        (i) SEQUENCE CHARACTERISTICS:
101
102
              (A) LENGTH: 18 amino acids
103
              (B) TYPE: amino acid
              (C) STRANDEDNESS: unknown
104
105
              (D) TOPOLOGY: unknown
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
107
110
         Ser Ile Ser Gln Ala Val His Ala Ala Arg Ala Glu Ile Asn Glu Ala
111
                         5
                                              10
         1
113
         Gly Arg
116 (2) INFORMATION FOR SEQ ID NO: 5:
118
         (i) SEQUENCE CHARACTERISTICS:
119
              (A) LENGTH: 18 amino acids
              (B) TYPE: amino acid
120
121
              (C) STRANDEDNESS: unknown
122
              (D) TOPOLOGY: unknown
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
124
         Ser Ile Ser Gln Ala Val His Ala Ala His Tyr Glu Ile Asn Glu Ala
126
                                              10
127
129
         Gly Arg
132 (2) INFORMATION FOR SEQ ID NO: 6:
         (i) SEQUENCE CHARACTERISTICS:
135
              (A) LENGTH: 13 amino acids
              (B) TYPE: amino acid
136
137
              (C) STRANDEDNESS: unknown
              (D) TOPOLOGY: unknown
138
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
140
        Asn Leu Cys Asn Ile Pro Cys Ser Ala Leu Leu Ser Ser
142
143
                                              10
146 (2) INFORMATION FOR SEQ ID NO: 7:
        (i) SEQUENCE CHARACTERISTICS:
```

DATE: 06/26/2001

```
PATENT APPLICATION: US/09/848,164
                                                          TIME: 15:15:09
                Input Set : N:\Crf3\RULE60\09848164.txt
                Output Set: N:\CRF3\06262001\I848164.raw
              (A) LENGTH: 11 amino acids
149
150
              (B) TYPE: amino acid
              (C) STRANDEDNESS: unknown
151
              (D) TOPOLOGY: unknown
152
154
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
156
         Gln Ile Ser Val Gln Pro Ala Phe Ser Val Gln
157
                          5
160 (2) INFORMATION FOR SEQ ID NO: 8:
         (i) SEQUENCE CHARACTERISTICS:
163
              (A) LENGTH: 13 amino acids
164
              (B) TYPE: amino acid
165
              (C) STRANDEDNESS: unknown
166
              (D), TOPOLOGY: unknown
168
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
         Pro Lys Tyr Val Lys Gln Asn Thr Leu Lys Leu Ala Thr
170
171
                                              10
174 (2) INFORMATION FOR SEQ ID NO: 9:
         (i) SEQUENCE CHARACTERISTICS:
176
177
              (A) LENGTH: 13 amino acids
178
              (B) TYPE: amino acid
179
              (C) STRANDEDNESS: unknown
180
              (D) TOPOLOGY: unknown
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
184
         His Tyr Gly Ser Leu Pro Gln Lys Ser Gln His Gly Arg
185
                          5
                                              10
         1
188 (2) INFORMATION FOR SEQ ID NO: 10:
         (i) SEQUENCE CHARACTERISTICS:
190
191
              (A) LENGTH: 13 amino acids
192
              (B) TYPE: amino acid
193
              (C) STRANDEDNESS: unknown
194
              (D) TOPOLOGY: unknown
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
196
198
         His Ser Leu Gly Lys Trp Leu Gly His Pro Asp Lys Phe
199
         1
202 (2) INFORMATION FOR SEQ ID NO: 11:
         (i) SEQUENCE CHARACTERISTICS:
204
205
              (A) LENGTH: 14 amino acids
206
              (B) TYPE: amino acid
              (C) STRANDEDNESS: unknown
207
208
              (D) TOPOLOGY: unknown
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
210
         Met Ala Ser Gln Lys Arg Pro Ser Gln Arg Ser Lys Tyr Leu
212
213
                                              10
         1
216 (2) INFORMATION FOR SEQ ID NO: 12:
218
         (i) SEQUENCE CHARACTERISTICS:
219
              (A) LENGTH: 27 base pairs
220
              (B) TYPE: nucleic acid
221
              (C) STRANDEDNESS: unknown
222
              (D) TOPOLOGY: unknown
```

RAW SEQUENCE LISTING

RAW SEQUENCE LISTING DATE: 06/26/2001 PATENT APPLICATION: US/09/848,164 TIME: 15:15:09

Input Set: N:\Crf3\RULE60\09848164.txt
Output Set: N:\CRF3\06262001\1848164.raw

```
224
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
                                                                            27
226 GCAGAAGAAT TCGAGCTCGG CCCCCAG
229 (2) INFORMATION FOR SEQ ID NO: 13:
         (i) SEQUENCE CHARACTERISTICS:
231
232
              (A) LENGTH: 33 base pairs
233
              (B) TYPE: nucleic acid
234
              (C) STRANDEDNESS: unknown
235
              (D) TOPOLOGY: unknown
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
239 GATGATATCA GAGAGAAATA CATACTAACA CAC
                                                                            33
242 (2) INFORMATION FOR SEQ ID NO: 14:
244
         (i) SEQUENCE CHARACTERISTICS:
245
              (A) LENGTH: 30 base pairs
246
              (B) TYPE: nucleic acid
247
              (C) STRANDEDNESS: unknown
248
              (D) TOPOLOGY: unknown
250
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
252 CGGAAGAAAG AGACTTCGGC CGCTACTTAC
                                                                            30
255 (2) INFORMATION FOR SEQ ID NO: 15:
        (i) SEQUENCE CHARACTERISTICS:
257
258
              (A) LENGTH: 47 base pairs
259
              (B) TYPE: nucleic acid
260
              (C) STRANDEDNESS: unknown
261
              (D) TOPOLOGY: unknown
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
265 GTGTGTTAGT ATGTATTTCT CTCTGATATC TTCAGCTTCC AGCAGTG
                                                                           47
268 (2) INFORMATION FOR SEQ ID NO: 16:
270
         (i) SEQUENCE CHARACTERISTICS:
271
              (A) LENGTH: 21 base pairs
272
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: unknown
273
274
              (D) TOPOLOGY: unknown
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
276
                                                                           21
278 TCTTCTAGAA GACCACGCTA C
281 (2) INFORMATION FOR SEQ ID NO: 17:
283
         (i) SEQUENCE CHARACTERISTICS:
284
              (A) LENGTH: 36 base pairs
285
              (B) TYPE: nucleic acid
286
              (C) STRANDEDNESS: unknown
287
              (D) TOPOLOGY: unknown
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
                                                                           36
291 GATGATATCC GGCCGAAGTC TCTTTCTTCC GTTGTC
294 (2) INFORMATION FOR SEQ ID NO: 18:
296
         (i) SEQUENCE CHARACTERISTICS:
297
              (A) LENGTH: 24 base pairs
298
              (B) TYPE: nucleic acid
299
              (C) STRANDEDNESS: unknown
300
              (D) TOPOLOGY: unknown
302
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
```

RAW SEQUENCE LISTING DATE: 06/26/2001
PATENT APPLICATION: US/09/848,164 TIME: 15:15:09

Input Set: N:\Crf3\RULE60\09848164.txt
Output Set: N:\CRF3\06262001\1848164.raw

```
24
304 CAGGGTTATC AACACCCTGA AAAC
306 (2) INFORMATION FOR SEQ ID NO: 19:
        (i) SEQUENCE CHARACTERISTICS:
309
             (A) LENGTH: 21 base pairs
              (B) TYPE: nucleic acid
310
311
             (C) STRANDEDNESS: unknown
312
              (D) TOPOLOGY: unknown
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
316 GTCACAGTTA TCCACTCTGT C
                                                                          21
319 (2) INFORMATION FOR SEQ ID NO: 20:
        (i) SEQUENCE CHARACTERISTICS:
321
322
             (A) LENGTH: 38 base pairs
323
              (B) TYPE: nucleic acid
              (C) STRANDEDNESS: unknown
324
325
              (D) TOPOLOGY: unknown
327
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:
329 CCGTCTCCTC AGGTACGGCC GGCCTCTCCA GGTCTTCG
                                                                          38
332 (2) INFORMATION FOR SEQ ID NO: 21:
334
         (i) SEQUENCE CHARACTERISTICS:
335
            (A) LENGTH: 39 base pairs
336
             (B) TYPE: nucleic acid
             (C) STRANDEDNESS: unknown
337
             (D) TOPOLOGY: unknown
338
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:
                                                                          39
342 CACAGTTATC CACTCTGTCT TTGATATCAC AGGTGTCCT
345 (2) INFORMATION FOR SEQ ID NO: 22:
347
       (i) SEQUENCE CHARACTERISTICS:
348
              (A) LENGTH: 13 amino acids
349
              (B) TYPE: amino acid
350
              (C) STRANDEDNESS: unknown
351
              (D) TOPOLOGY: unknown
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:
353
355
        His Ser Leu Gly Lys Tyr Leu Gly His Pro Asp Lys Phe
356
        1
359 (2) INFORMATION FOR SEQ ID NO: 23:
       (i) SEQUENCE CHARACTERISTICS:
361
362
              (A) LENGTH: 13 amino acids
363
              (B) TYPE: amino acid
              (C) STRANDEDNESS: unknown
364
365
              (D) TOPOLOGY: unknown
        (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:
367
        His Ser Leu Gly Lys Leu Leu Gly His Pro Asp Lys Phe
369
370
                         5
                                            10
373 (2) INFORMATION FOR SEQ ID NO: 24:
375
        (i) SEQUENCE CHARACTERISTICS:
376
              (A) LENGTH: 18 amino acids
             (B) TYPE: amino acid
377
             (C) STRANDEDNESS: unknown
378
379
             (D) TOPOLOGY: unknown
```

## VERIFICATION SUMMARY PATENT APPLICATION: US/09/848,164 DATE: 06/26/2001 TIME: 15:15:10

Input Set : N:\Crf3\RULE60\09848164.txt
Output Set: N:\CRF3\06262001\1848164.raw

```
L:30 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:31 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:1861 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1865 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1869 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1873 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1877 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1881 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1885 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1889 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1893 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1897 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1901 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1905 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1909 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1913 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1917 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1921 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1925 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1929 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1933 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1937 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1941 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1945 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1949 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1953 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1957 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1961 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1965 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1969 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1973 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1977 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1981 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:1985 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:122
L:2006 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123
L:2010 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123
L:2014 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123
L:2018 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123
L:2022 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123
L:2026 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123
L:2030 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123
L:2034 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123
L:2038 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123
L:2042 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123
L:2046 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123
L:2050 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123
L:2054 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123
L:2058 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123
```

VERIFICATION SUMMARY

DATE: 06/26/2001 TIME: 15:15:10

PATENT APPLICATION: US/09/848,164 TIM

Input Set : N:\Crf3\RULE60\09848164.txt
Output Set: N:\CRF3\06262001\1848164.raw

L:2062 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123 L:2066 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123 L:2070 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123 L:2074 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:123